Amputation Prevention and Personal Responsibilities

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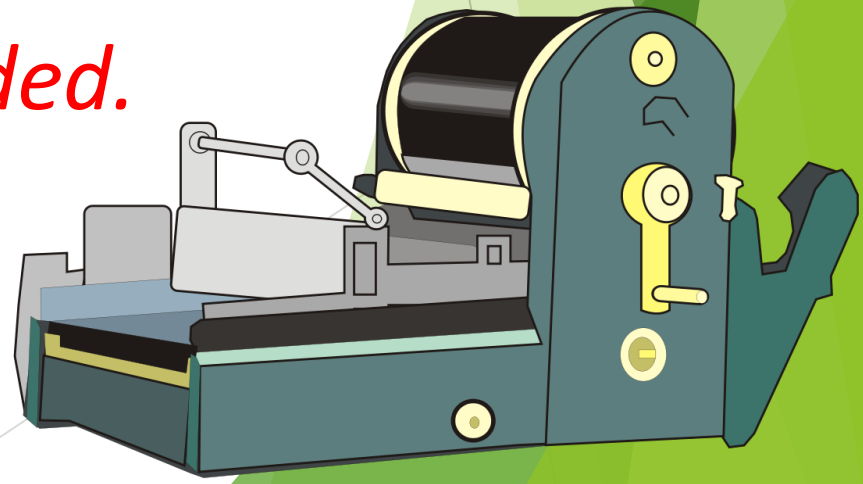
What's an Arm and a Leg Worth?

Take a Stand to Stop Amputations Today!

Controlling Amputation Hazards

Safeguarding is essential for protecting employees from needless and preventable injury. A good rule to remember is:

Any machine part, function, or process that may cause injury must be safeguarded.

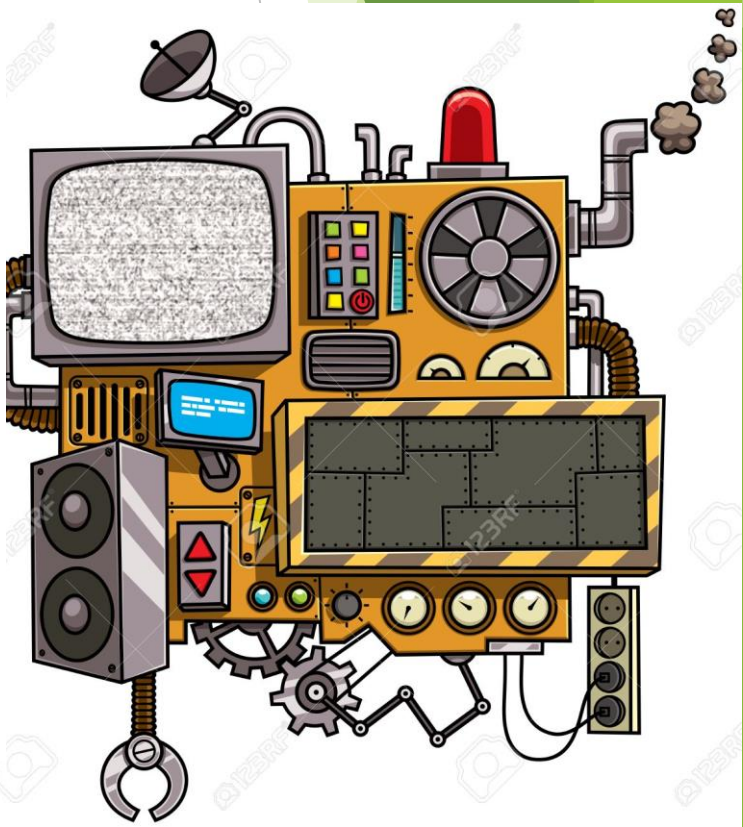


OSHA Definition: Amputation

- An *amputation* is the traumatic loss of all or part of a limb or other external body part. This would include fingertip *amputations* with or without bone loss; medical amputation resulting from irreparable damage; and amputations of body parts that have since been reattached.

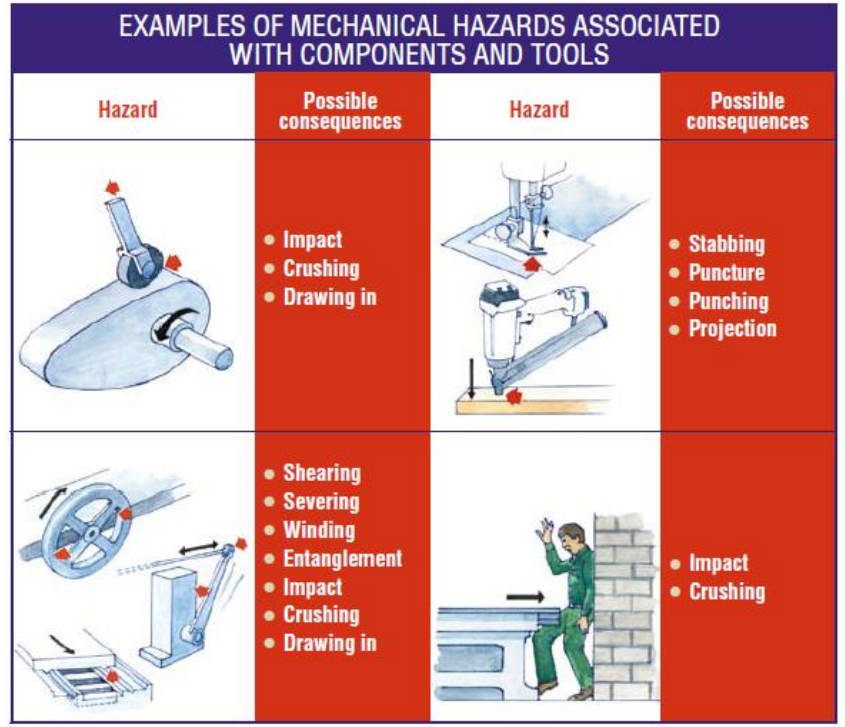
Machinery Associated with Amputations

1. Mechanical Power Presses
2. Power Press Brakes
3. Powered and Non-Powered Conveyors
4. Printing Presses
5. Roll-Forming and Roll-Bending Machines
6. Shearing Machines
7. Food Slicers
8. Meat Grinders
9. Meat-Cutting Band Saws
10. Drill Presses
11. Milling Machines
12. Grinding Machines
13. Slitters



Hazardous Activities

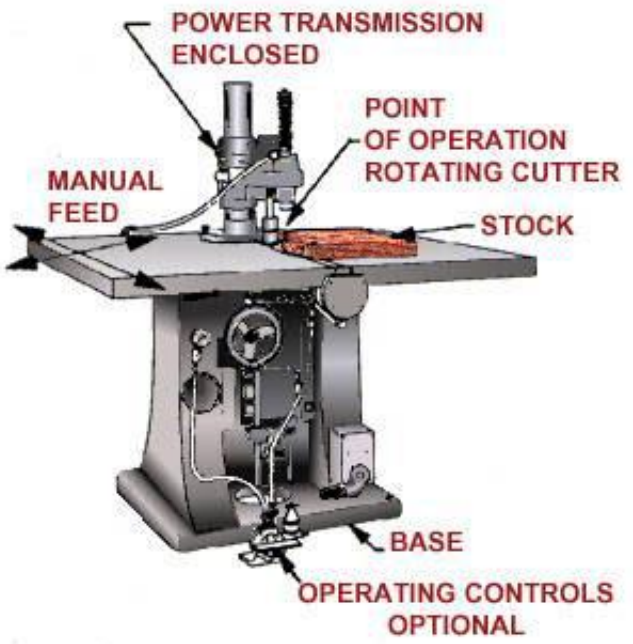
- Machine set-up/threading/preparation,*
- Machine inspection,*
- Normal production operations,
- Clearing jams,*
- Machine adjustments,*
- Cleaning of machine,*
- Lubricating of machine parts,* and
- Scheduled and unscheduled maintenance.*



*These activities are servicing and/or maintenance activities.

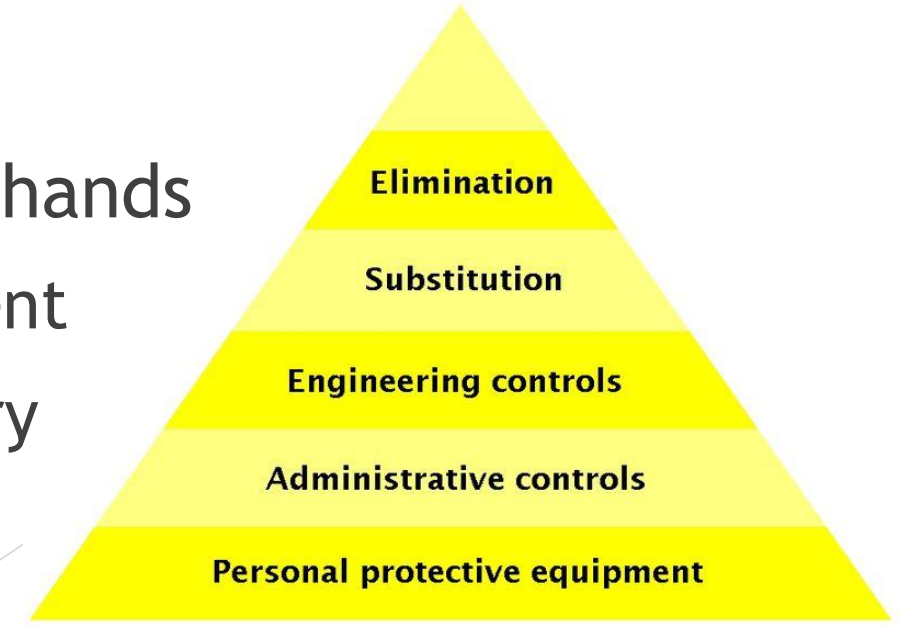
What types of machine components are hazardous?

- **Point of Operation** – the area of a machine where it performs work on material
- **Power-Transmission Apparatuses** – flywheels, pulleys, belts, chains, couplings, spindles, cams, and gear in addition to connecting rods and other machine components that transmit energy
- **Other Moving Parts** – machine components that move during machine operation such as reciprocating, rotating, and transverse moving parts as well as auxiliary machine parts



Safeguards Against Amputations

- Elimination- of any hazards to avoid any possibility
- Engineering- by guarding around all moving parts
  - Including barriers, fencing, interlocks, etc.
- Administrative Controls- to control recognized hazards
  - LOTO is an example of this
- Personal Protection- Keep awareness of your hands
  - Do not bypass guards or work on live equipment
  - Avoid wearing loose clothing, gloves or jewelry

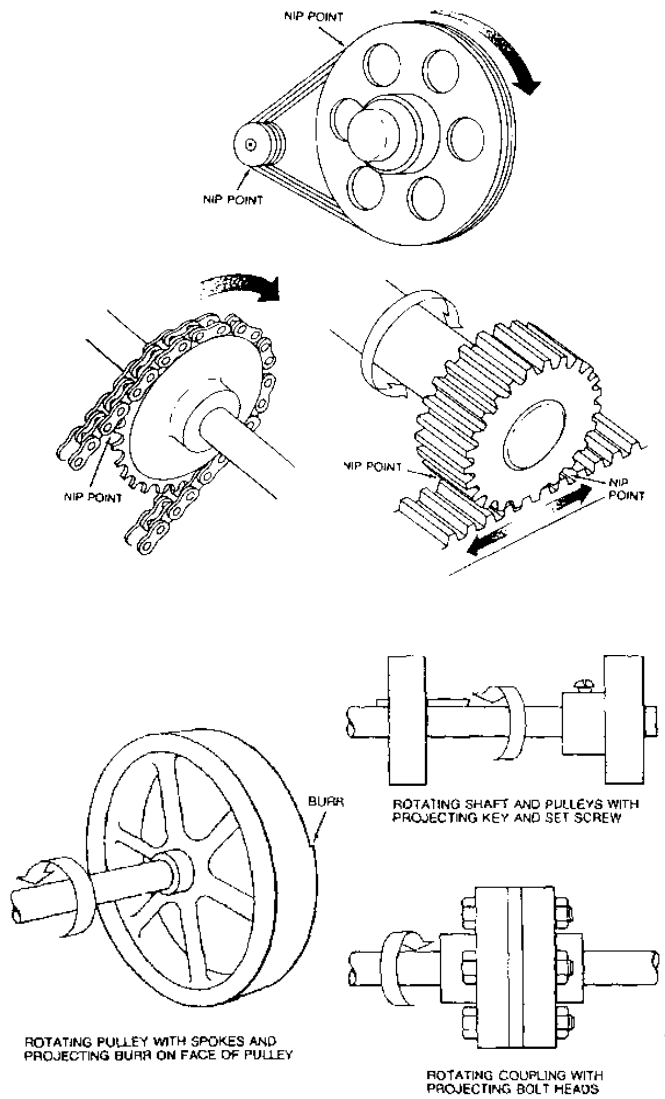


Safeguards Against Amputations

- Be aware of different hazards that cause amputations
- Focus on eliminating as many as possible
  - Then look to control you and your co-workers
- Not every single hazard can be eliminated
  - Always be aware of your surroundings
  - Never put yourself in a situation where injury is likely to occur

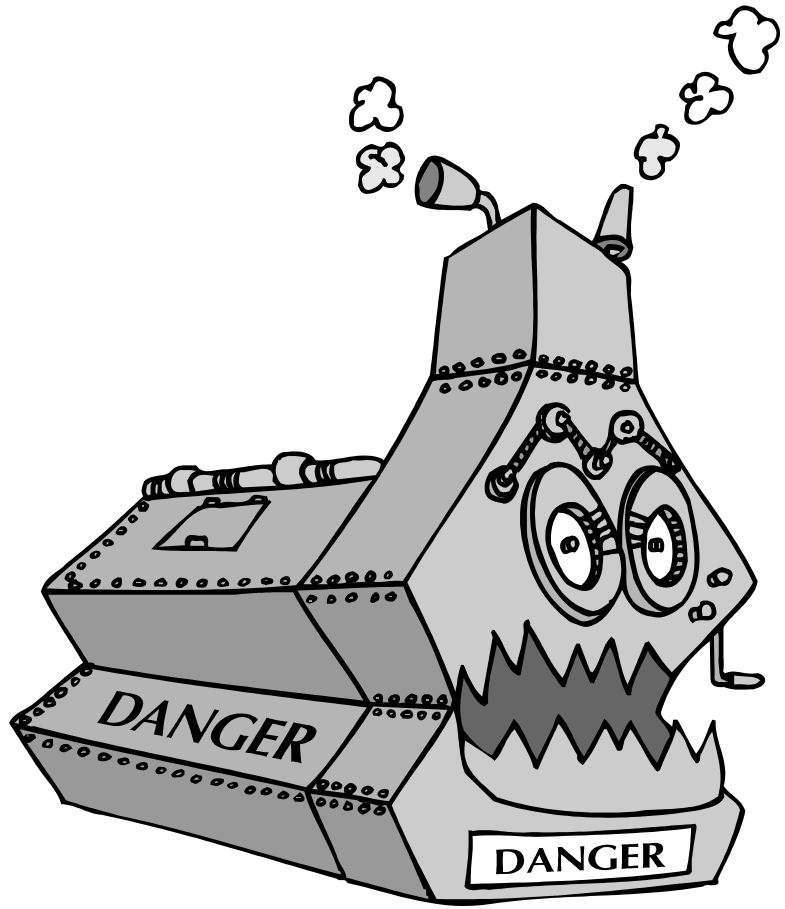
What kinds of mechanical motion are hazardous?

- Rotating
- Reciprocating
- Transversing
- Cutting
- Punching
- Shearing
- Bending



Design of Equipment

- Equipment
  - Safety
  - Controls
- Guarding
- Ergonomic
- Accessibility
  - Free from harm
  - Allows for production



Design of Equipment

- **Guards** provide physical barriers that prevent access to hazardous areas.
- **Devices** help prevent contact with points of operation and may replace or supplement guards.

Criteria for Machine Safeguarding

- Prevents worker contact with the hazard area during the operating cycle.
- Avoids creating additional hazards.
- Is secure, tamper-resistant, and durable.
- Avoids interfering with normal operation of the machine.
- Allows for safe lubrication and maintenance.

The Best Prevention of Amputations and Injuries

Is ***YOU!***

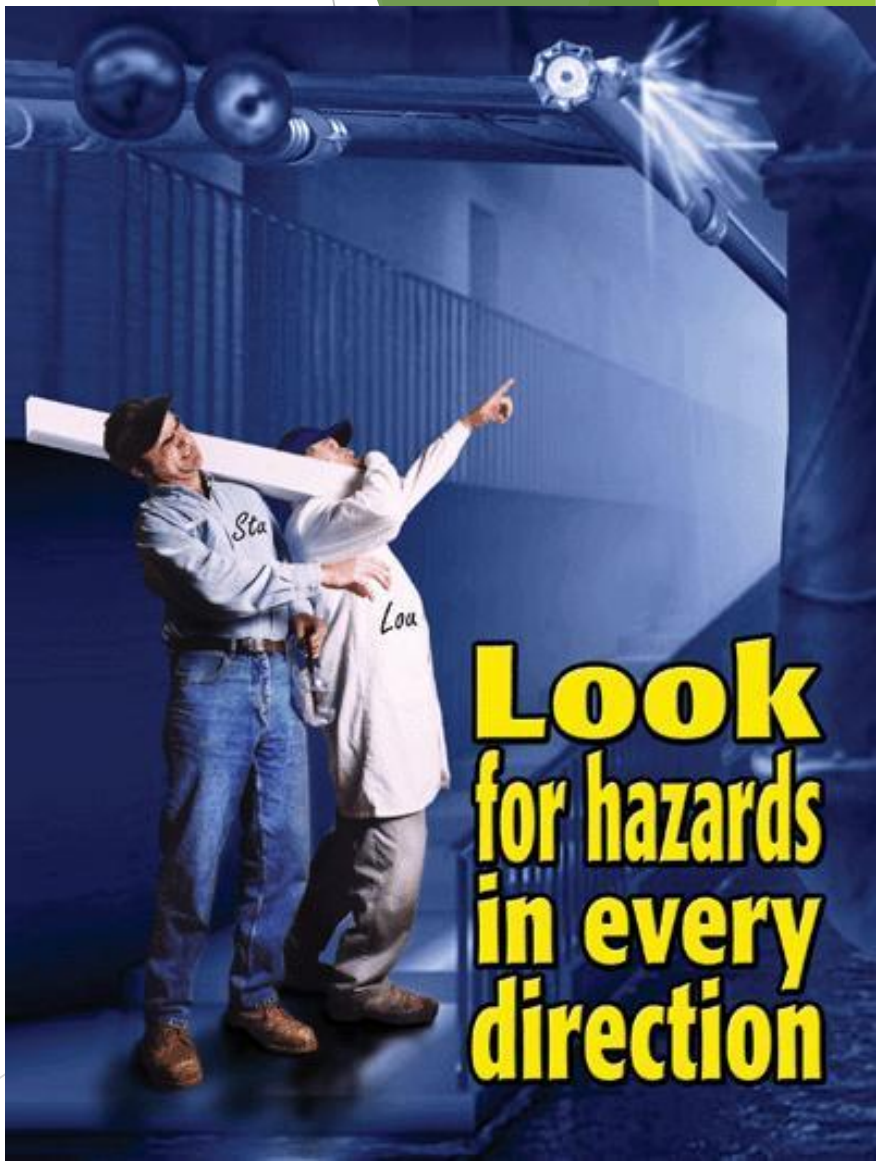
It involves 2 things

- Human Behavior
- Personal Responsibility

PROaction versus REaction

- “Well that’s an accident waiting to happen…”
- “Someone ought to do something…”

That someone is YOU!



ACCIDENTS

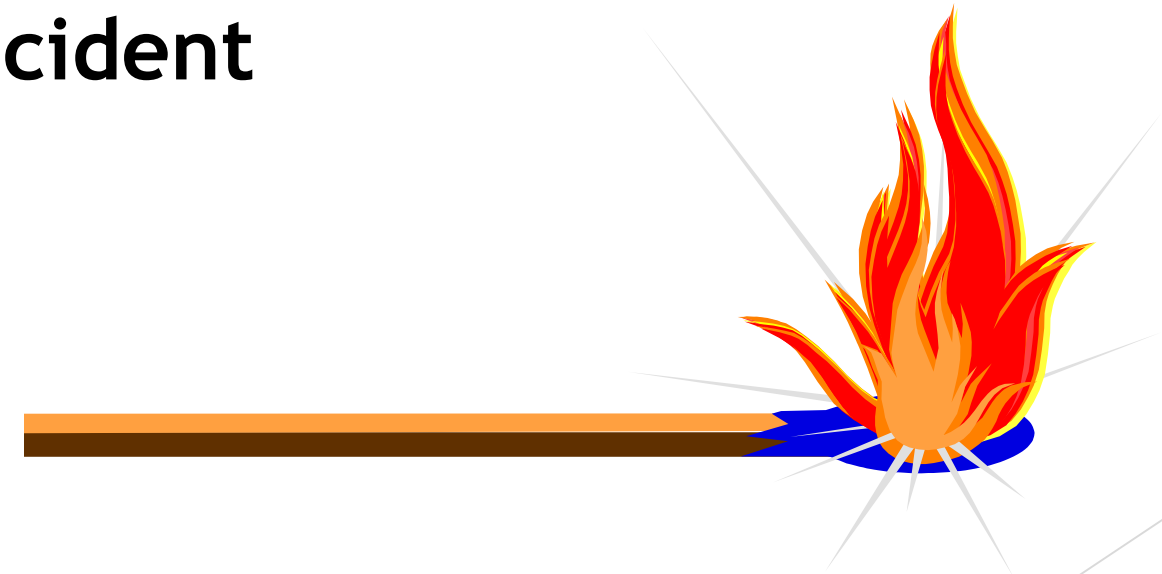
ACCIDENTS HAVE TWO THINGS IN COMMON

ACCIDENTS

They all have outcomes from the accident

ACCIDENTS

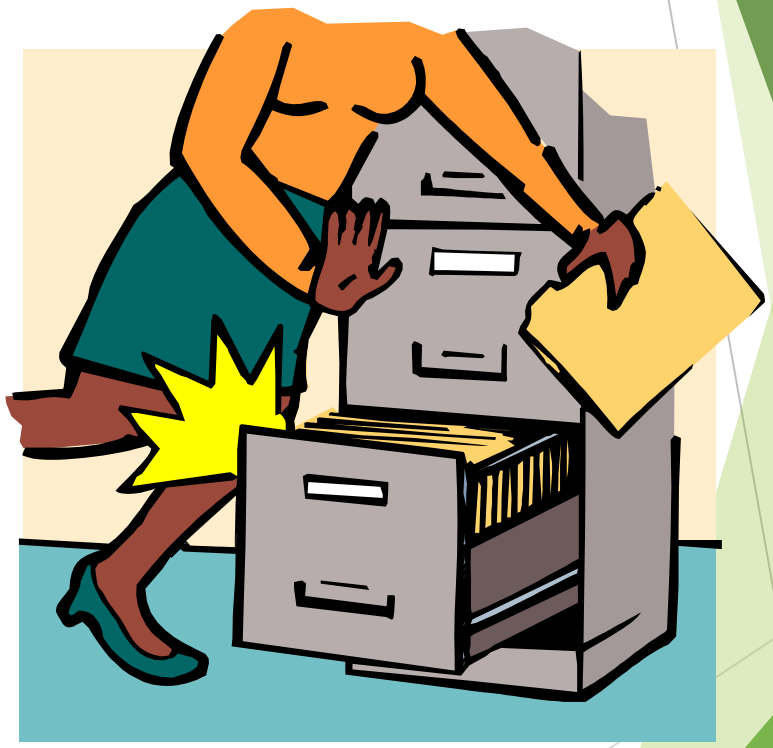
They all have contributory factors that cause the accident



Hazard

- Existing or Potential Condition That Alone or Interacting With Other Factors Can Cause Harm

- A Spill on the Floor
- Broken Equipment



Risk

- A measure of the probability and severity of a hazard to harm human health, property, or the environment
- A measure of how likely harm is to occur and an indication of how serious the harm might be

Risk ≠ 0

Safety

FREEDOM FROM DANGER OR HARM

Nothing is Free of

BUT - We can almost always make something SAFER

Safety Is Better Defined As….

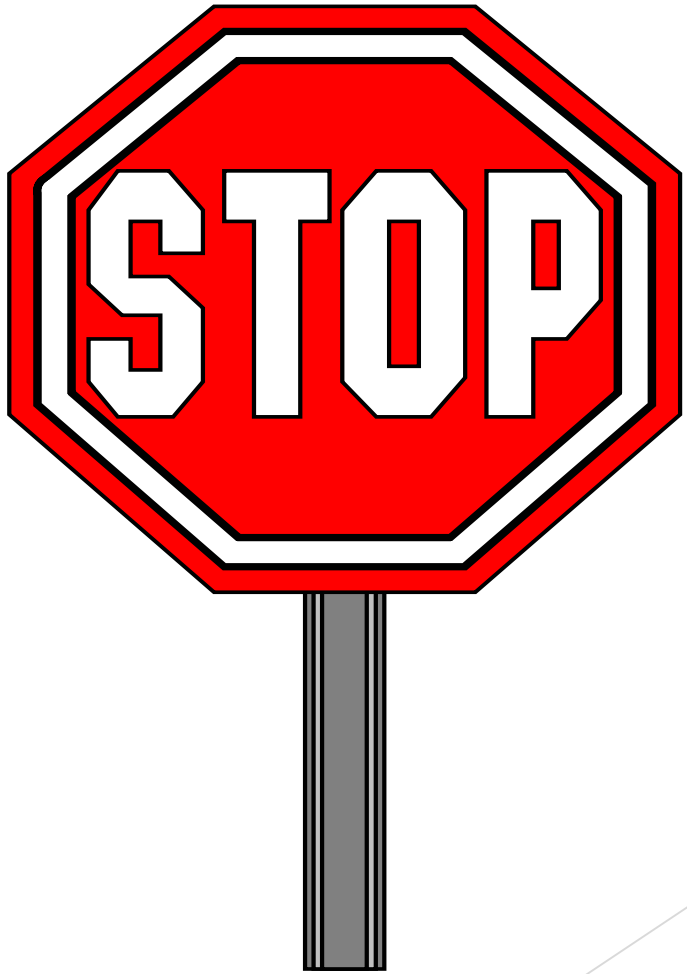
A Judgement of the Acceptability of Risk

Human Behavior

Common to all accidents

Not limited to the person involved in accident

Why is one sign often ignored, the other one often followed?



$ Direct Costs

- Medical
- Insurance
- Lost Time
- Fines

Indirect Costs

- Injured, Lost Time Wages
- Non-Injured, Lost Time Wages
- Overtime
- Supervisor Wages
- Lost Bonuses
- Employee Morale
- Need For Counseling
- Turn-over

Indirect Costs

- Equipment Rental
- Cancelled Contracts
- Lost Orders
- Equipment/Material Damage
- Investigation Team Time
- Decreased Production
- Light Duty
- New Hire Learning Time
- Administrative Time
- Community Goodwill
- Public/Customer Perception
- 3rd Party Lawsuits

Real Costs

9 ways to take personal responsibility for safety

Behaviors critical to ensure this step change

Clear Expectations

- Make safety important
- Follow the rules and procedures
- Ensure you understand what is expected of you and your team members

Effective Communication

- Where possible, use face to face communication
- Always listen carefully
- Ask open ended questions
- Verify understanding

Personal Leadership

- Lead by example and show safe behavior
- Have courage to do the right thing
- Never tolerate unsafe behavior even
  - At work, home or leisure

Personal Risk Awareness

- Stay aware of your surroundings
- Remain alert to changes
- Never put yourself or others at risk
- Contribute to discussions about risks on the job

Planning

- Take time to familiarize yourself with the safety aspects of the job
- Question any areas that are not completely clear to you

Duty to Intervene

- Challenge any unsafe acts or conditions
- Promote and praise positive and safe behavior
- Welcome intervention from others

Accountability

- Accept responsibility for your actions and their consequences
- Take action and offer solutions to prevent incidents
- Follow the rules, they are there to keep you safe
- Take responsibility and ownership for safety
- Take time to think about the positive and negative consequences of your actions and those around you

Self Evaluation

- List your personal commitments to safety
- Share them with your team members
- Request regular feedback

Develop, Encourage and Sustain Safe Behavior

- Start everyday by thinking of how you can keep yourself and others safe
- Practice hazard recognition
- Consistently do things the safe way at work and at home
- Share good practices
- Intervene to change bad practices

Develop, Encourage and Sustain Safe Behavior

- Give and act on positive and opportunity feedback
- Continually look for opportunities to learn from others
- Keep communicating the benefits of sustained safety
- BE THE LEADER!!!

Personal Responsibility Involves Human Behavior

Human Behavior

- Focusing on “Awareness” is a typical educational approach to change safety behavior
- Example: You provide employees with a persuasive rationale for wearing safety glasses and hearing protection in certain work areas

WIIFM
What’s In It For Me!

Human Behavior

Developing Personal Safety Awareness

A) Before starting, consider how to do job safely
B) Understand required P.P.E. and how to use it
C) Determine correct tools and ensure they are in good condition
D) Scan work area – know what is going on
E) As you work, check work position – reduce any strain
F) Any unsafe act or condition should be corrected
G) Remain aware of any changes in your workplace – people coming, going, etc.
H) Talk to other workers about safety
I) Take safety home with you

Human Behavior

TIME!

“All this safety stuff takes time doesn’t it”?

“I’m too busy”!

“I can’t possibly do all this”!

“The boss wants the job done now”!

Human Behavior

- Does rushing through the job, working quickly without considering safety, really save time?
- Remember – if an incident occurs, the job may not get done on time and someone could be injured – and that someone could be YOU!!

Accidents are What Happens to Somebody Else

BUT REMEMBER:

YOU

are somebody else

to somebody else

Questions?

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